

デュアル光コム共焦点顕微鏡

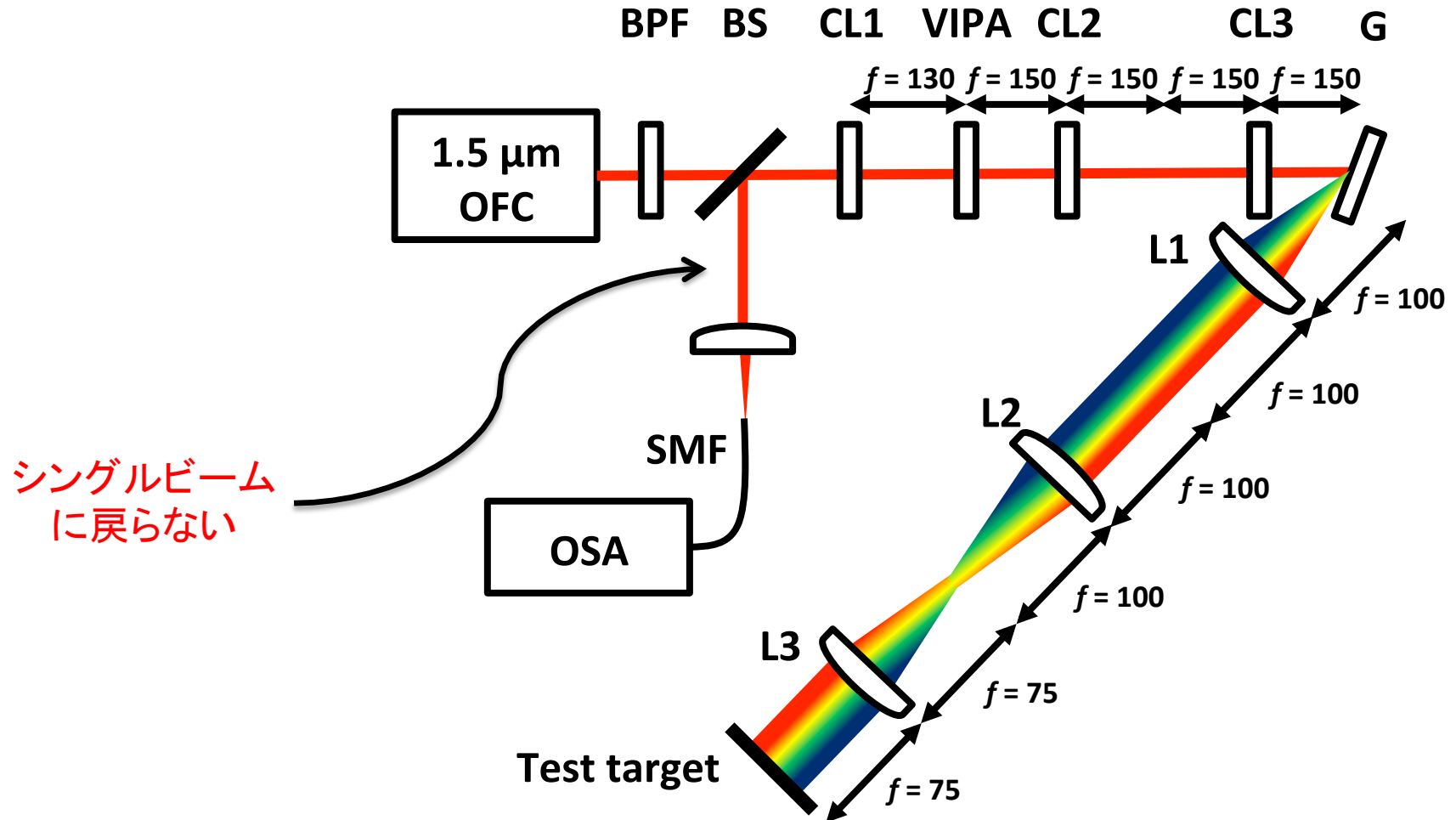
実験進捗状況

2015/9/7 ERATOミーティング

長谷, 宮本

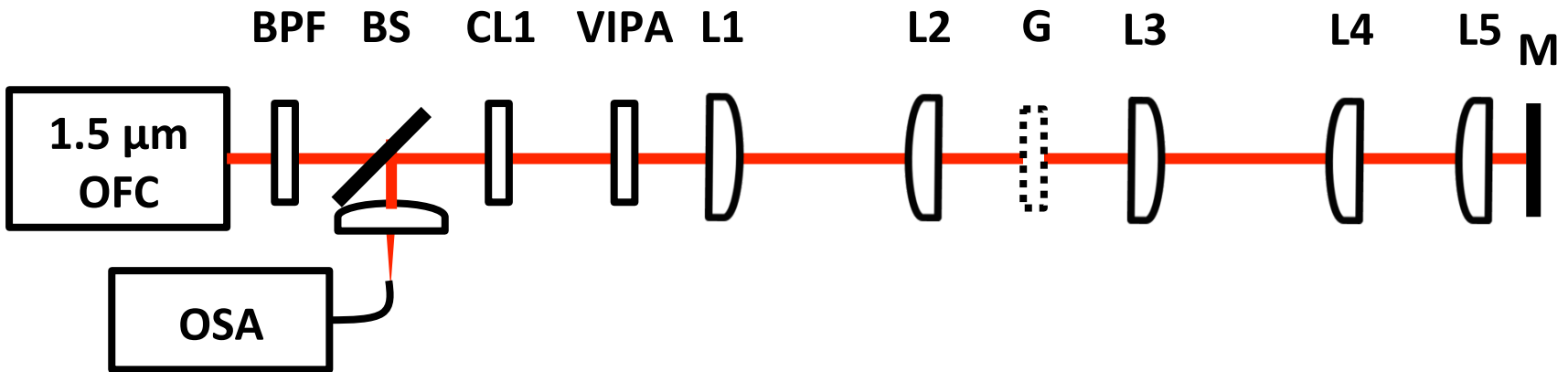
2Dスキャンレス共焦点コム顕微鏡

前回構築したセットアップ@宮本(2015年3月)

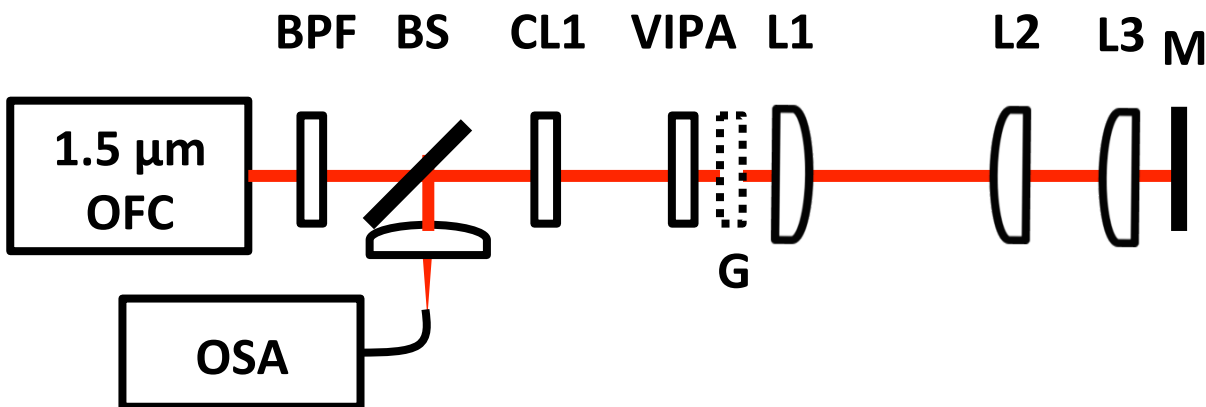


VIPAを用いた確認実験

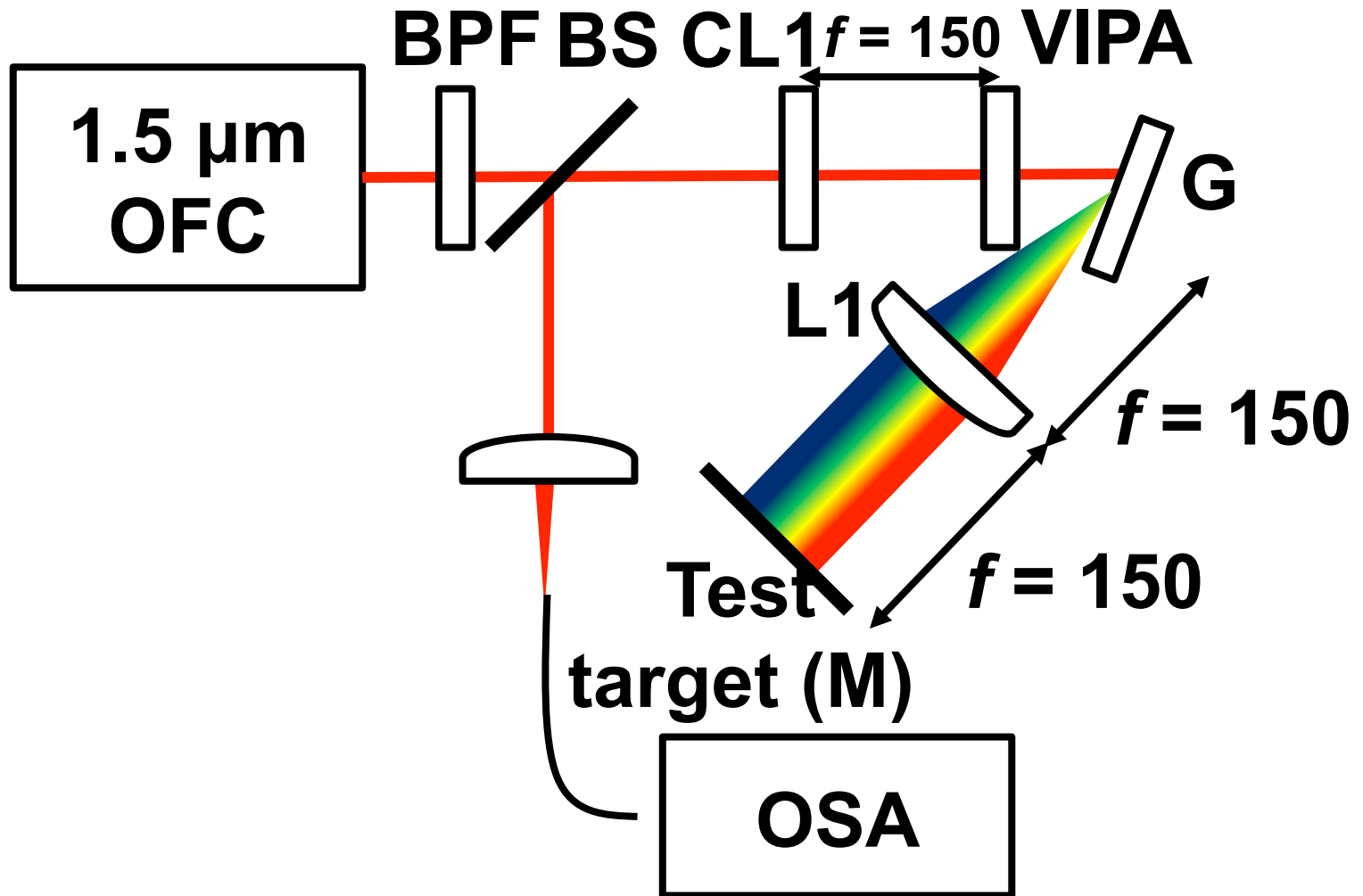
①VIPA用リレーレンズ+回折格子用リレーレンズ



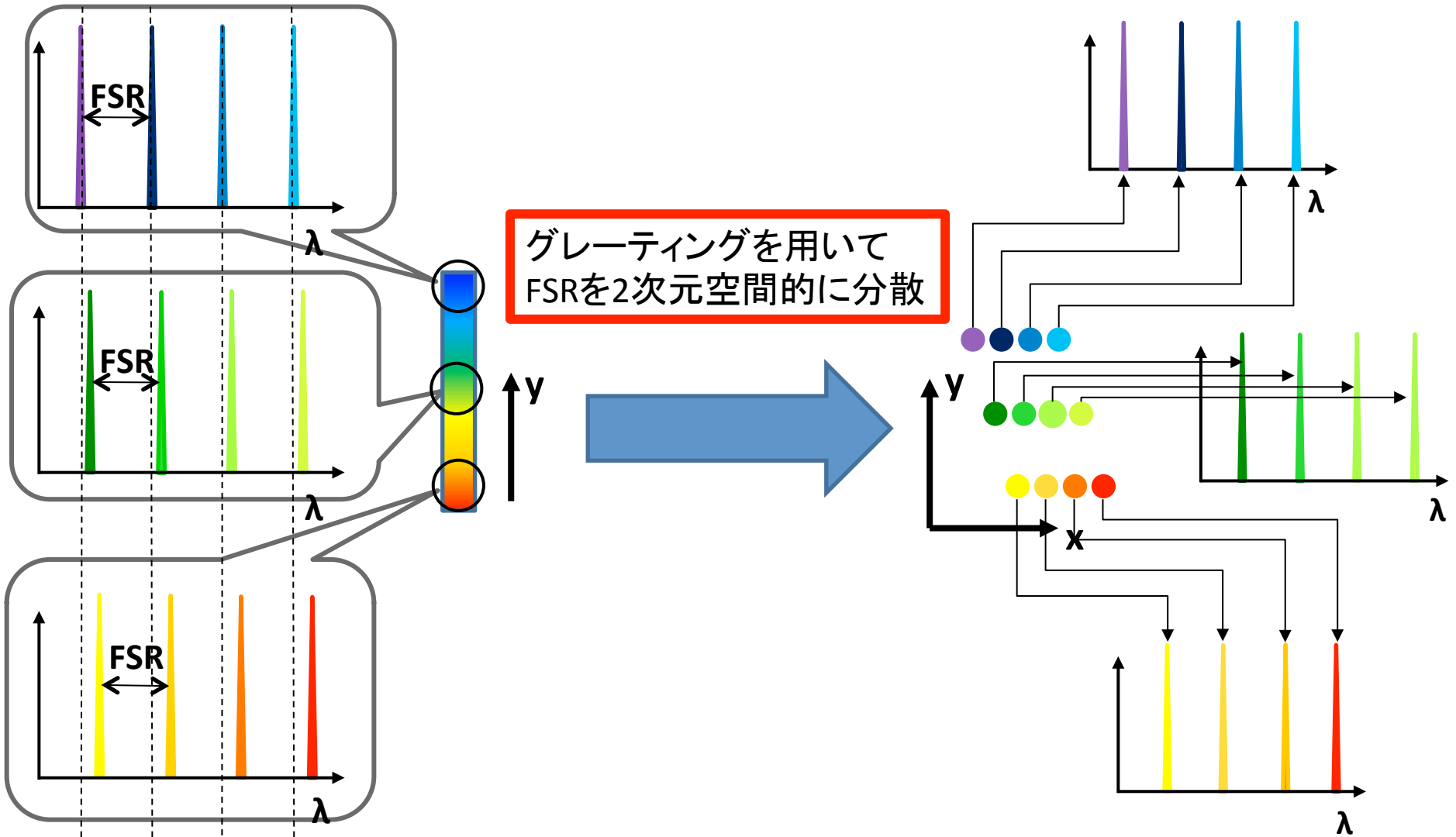
②VIPA&回折格子+リレーレンズ



2Dスキャンレス共焦点コム顕微鏡

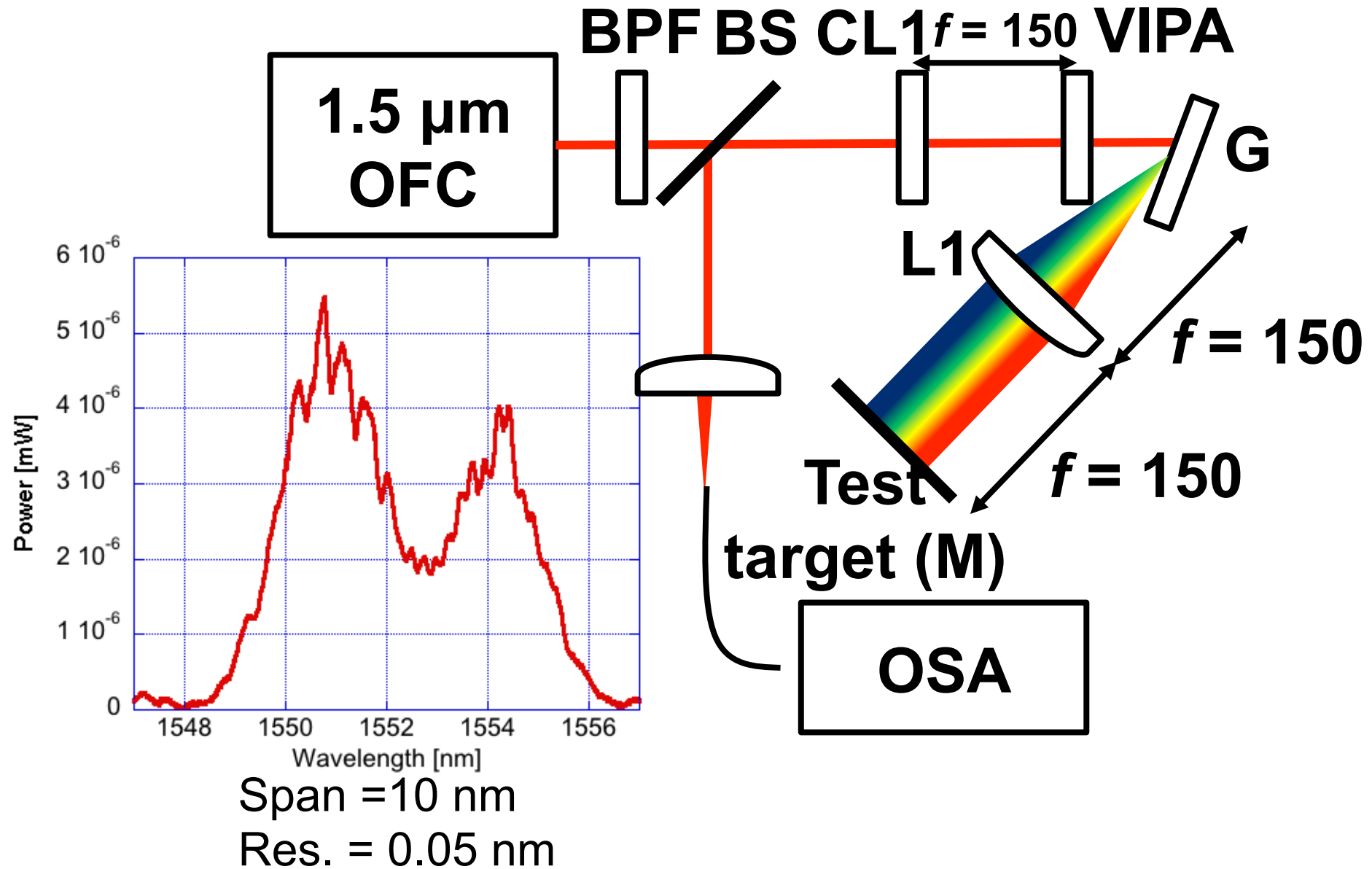


VIPA + Grating

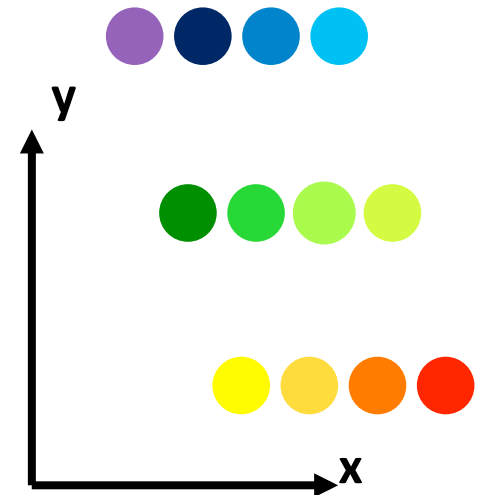
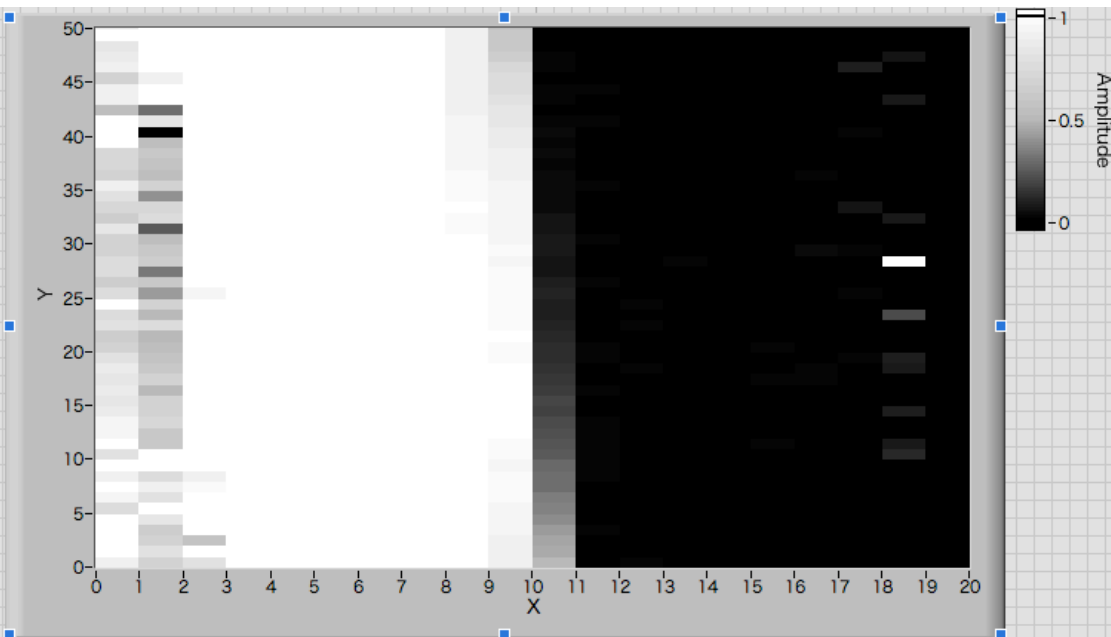
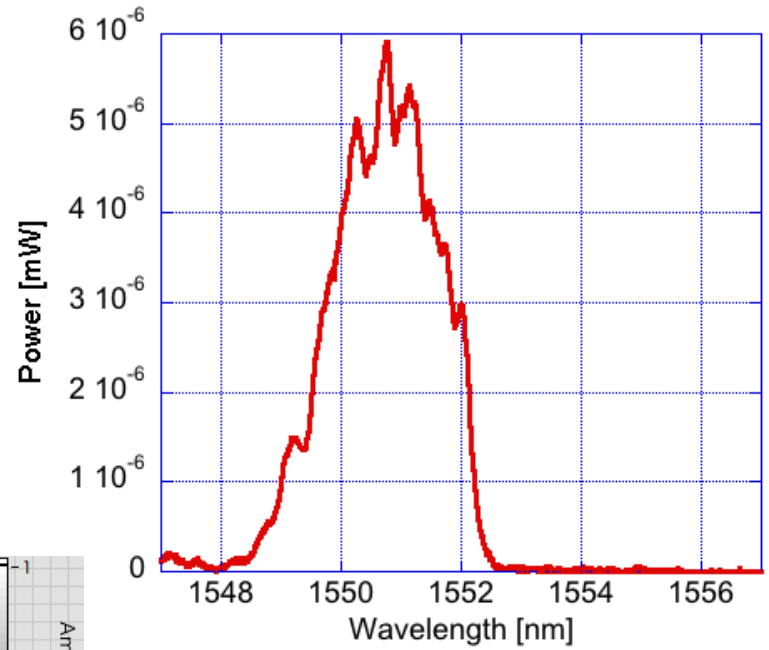
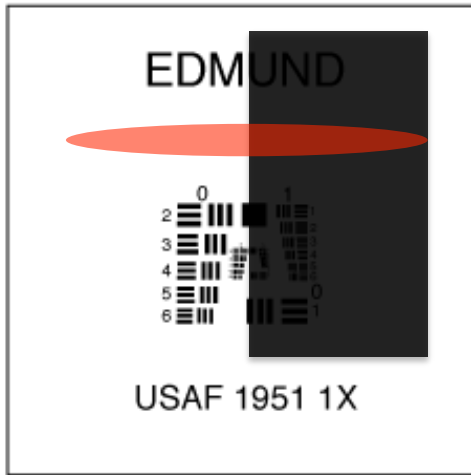


空間的に同じ場所に他の次数の異なる波長成分が重畳 = FSR

2Dスキャンレス共焦点コム顕微鏡



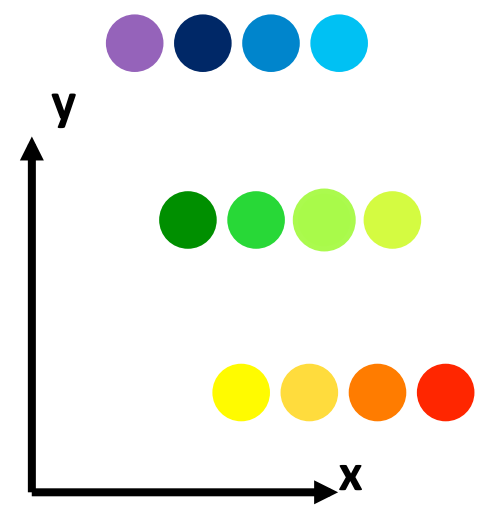
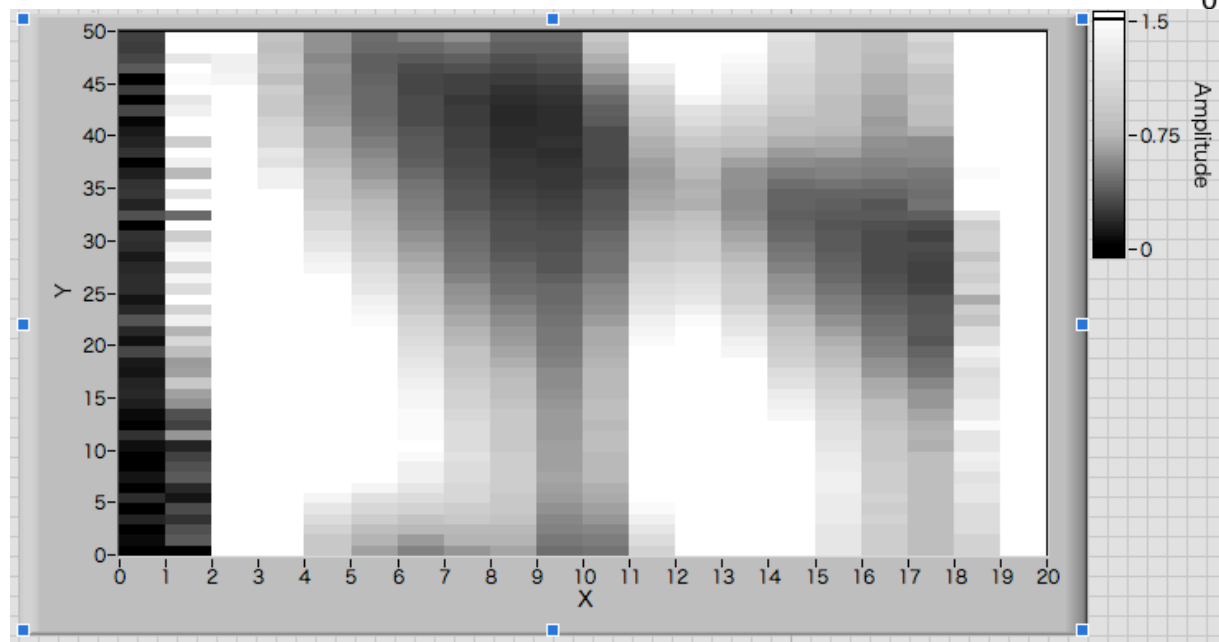
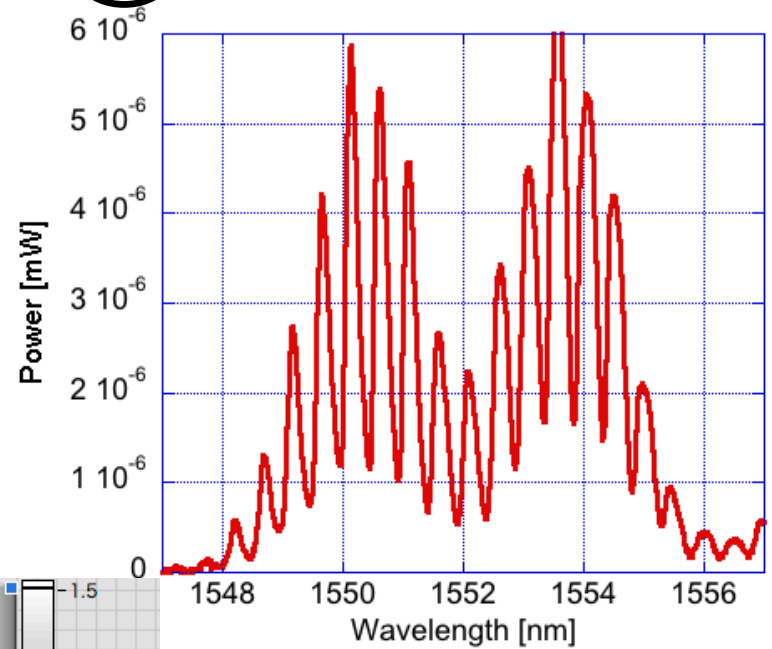
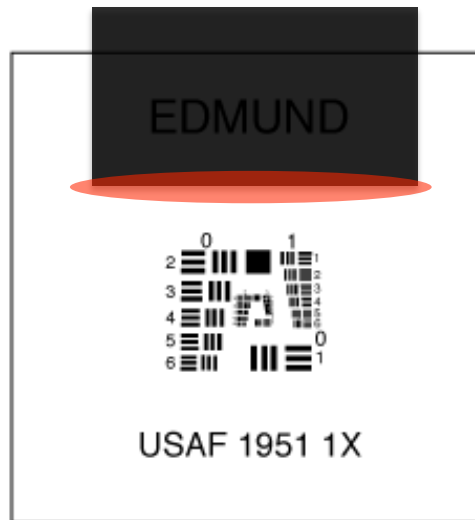
実験結果①



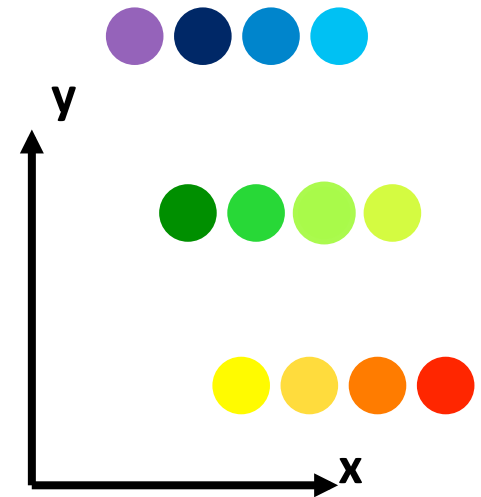
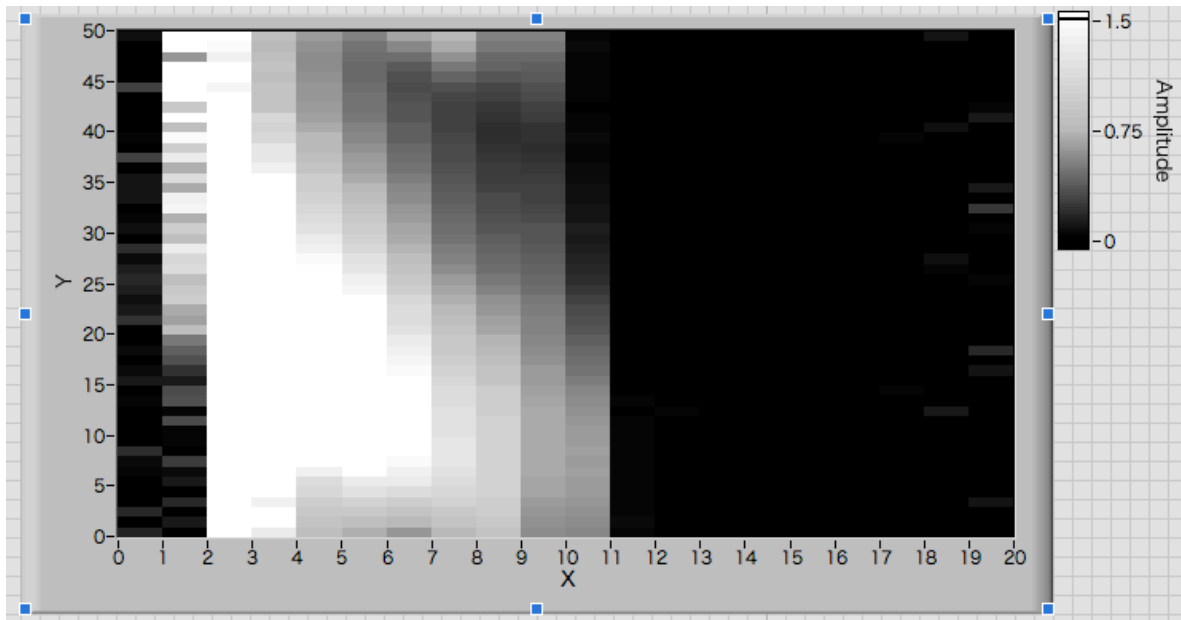
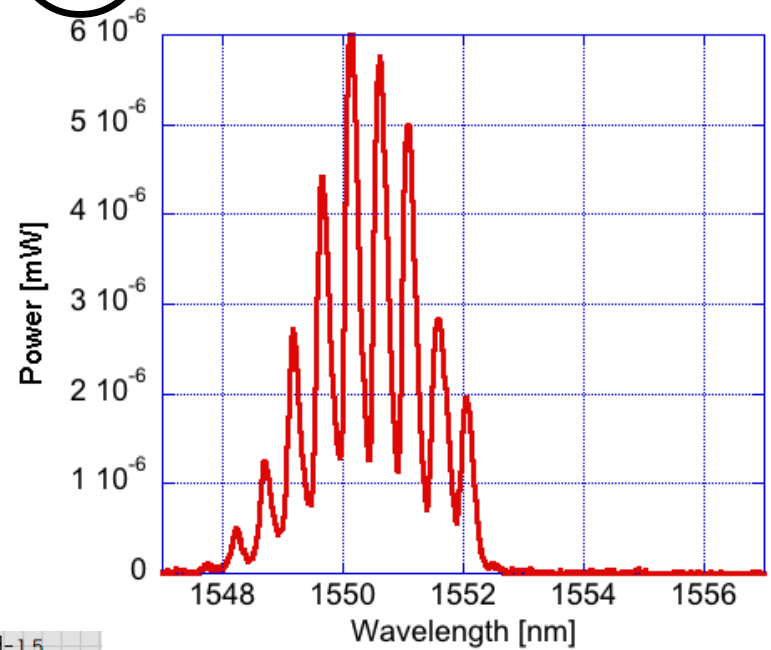
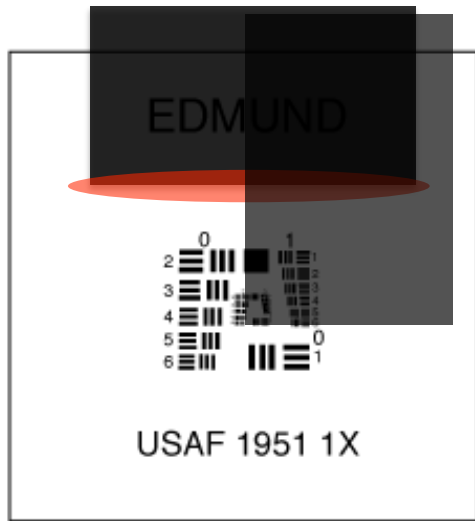
 **Edmund**
optics | worldwide



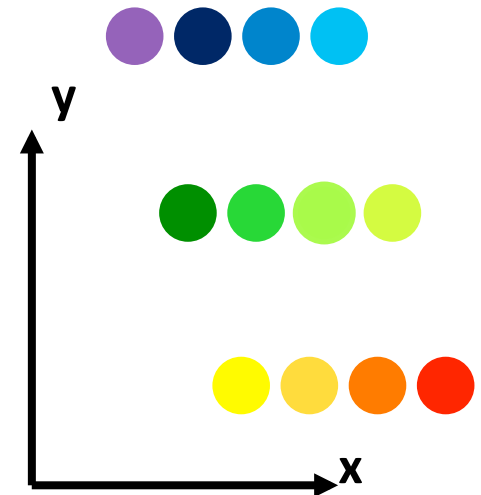
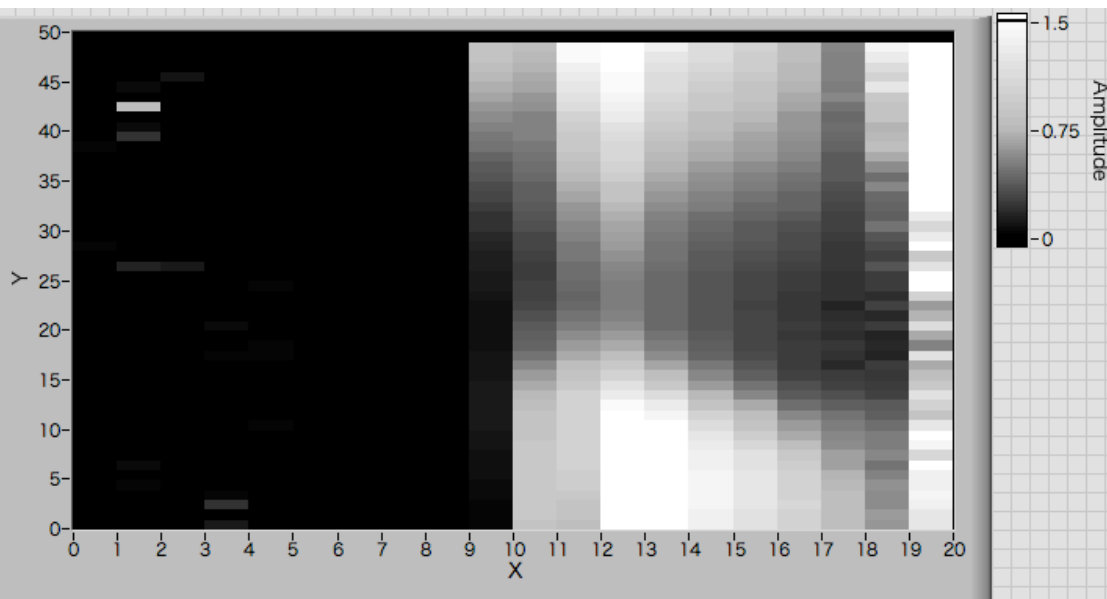
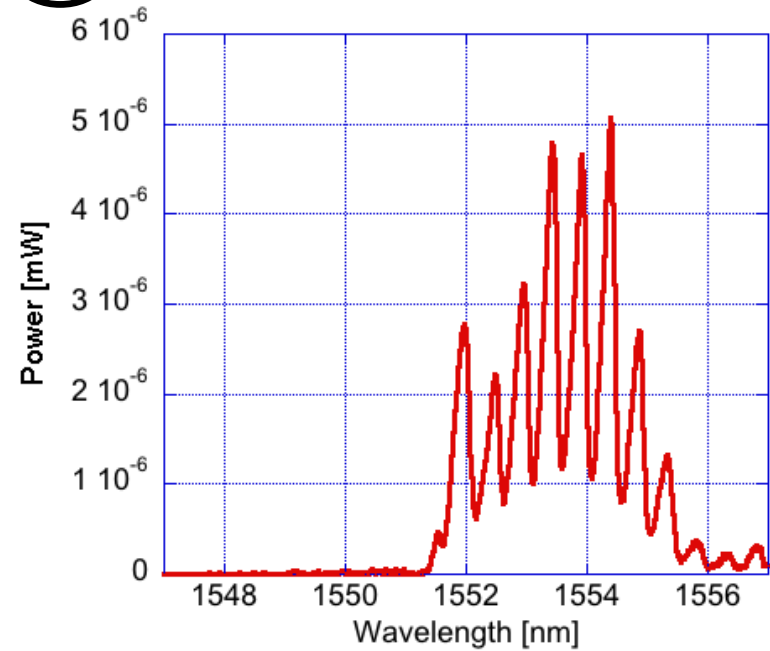
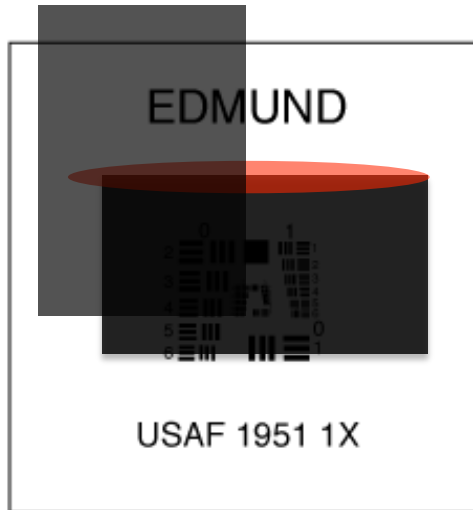
実験結果②



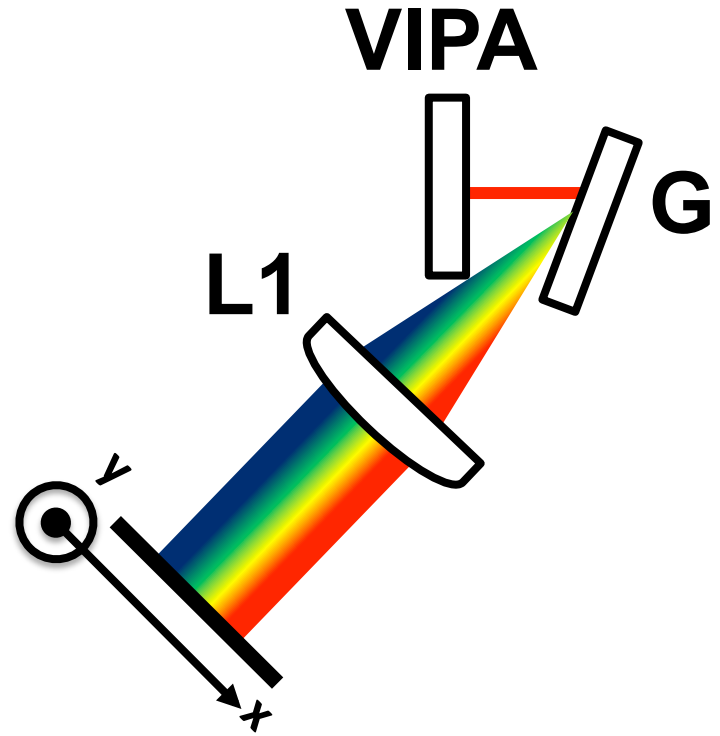
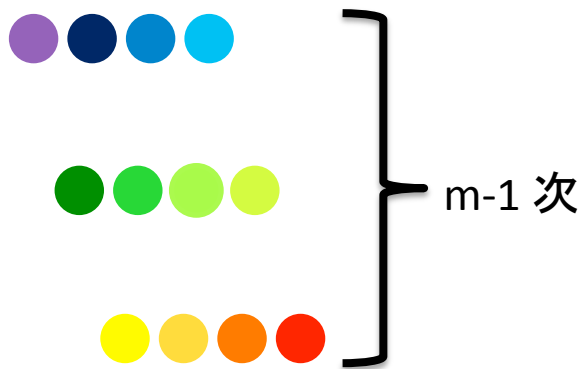
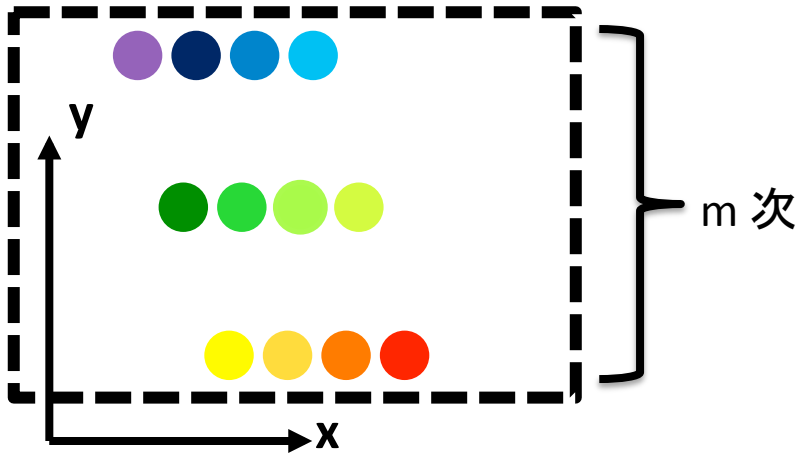
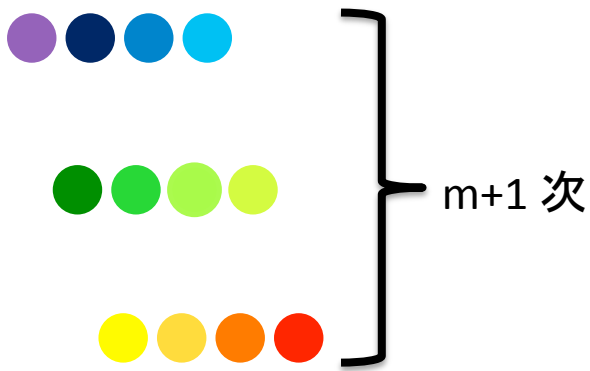
実験結果③



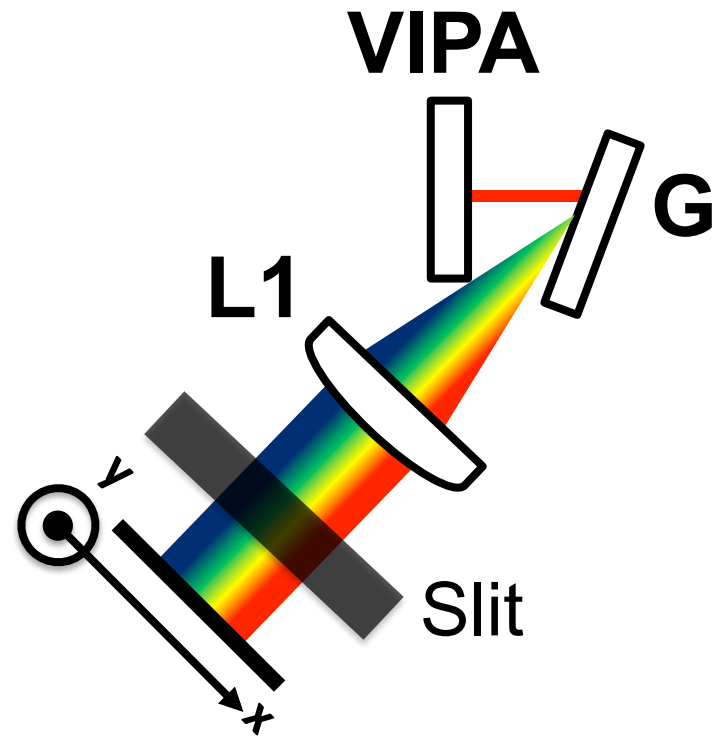
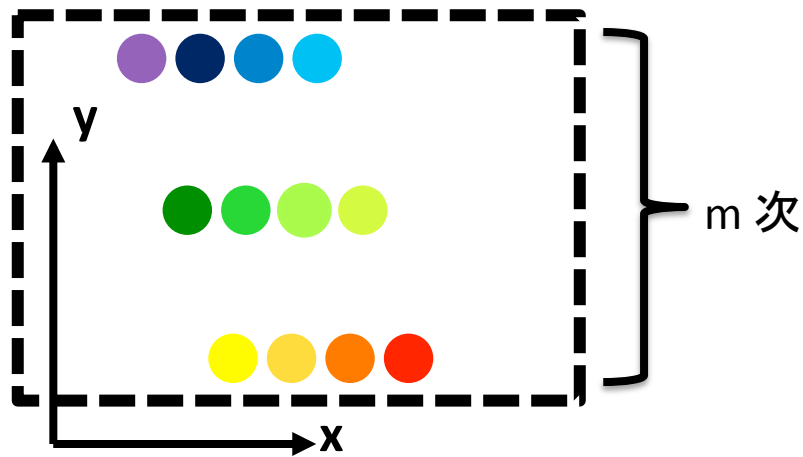
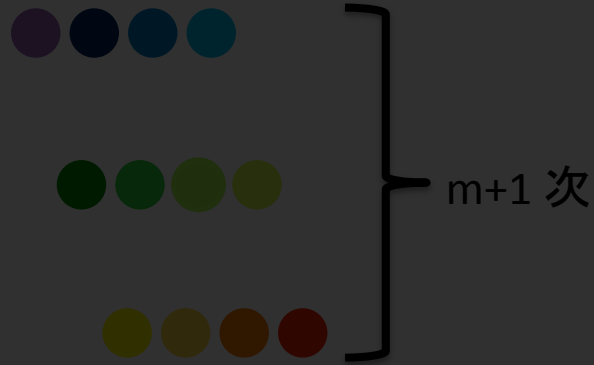
実験結果④



単一次数抽出の最適化



単一次数抽出の最適化



まとめ

- VIPAと回折格子で2Dワンショット画像取得

今後の予定

- 単一次数抽出の最適化
- $f=75$ mmのレンズを用いてビーム照射領域を縮小
- 縮小光学系(リレーレンズ)+共焦点系の導入
- 検出をOSA▶DCS